

a brace body adapted to be wrapped around a torso of a patient, said front piece and said rear piece, said brace body comprising at least two brace body segments;

means provided at free end portions of said at least two brace body segments for detachably securing the two free end portions together around the patient's torso;

at least one cable operatively connected to said at least two brace body segments; and

at least one set of pulleys mounted on each of said at least two brace segments with the cable running through a pulley on each segment in alternation, shortening of the cable pulling the at least two brace body segments together and tightening the body brace with the aid of a mechanical advantage dependent upon the number of pulleys mounted on each of said at least two brace body segments, the at least one set of pulleys comprising two banks of pulleys and each bank of pulleys being detachably mounted on a juxtaposed edge of an adjacent segment. - -

REMARKS

Claims 1-7, 9-29 and 31-44 are pending in the Application. By this Amendment, claims 1, 17, 22 and 31 are amended, claims 8 and 30 are canceled without prejudice or disclaimer and claims 36-44 are added.

Applicants express their appreciation for the Examiner's courtesy and helpful comments extended during a personal interview with Applicants' representative on September 12, 2000. Points discussed during the interview are incorporated in this Amendment.

The Office Action objects to the drawings because "14c" should be labeled "14a". It is respectfully submitted that Fig. 2 is properly labeled. By maintaining the same labeling, Fig. 2 would comport with Fig. 1. Also, reference "14a" is an opposite distal or free end of the brace body segment 12a. (See page 8, lines 12-16). The reference "14c" is an proximate or juxtaposed edge of the body brace segment 12a. (See page 11, lines 8-12). Based on the above, it is believed that no correction to the drawings figures are required. Withdrawal of the rejection is respectfully requested.

The Office Action rejects claims 1, 2, 4, 5, 8, 10-16, 19 and 21-35 under 35 U.S.C. §102(b) as anticipated by Beczak, Sr. et al. (U.S. Patent No. 5,599,287). The rejection is respectfully traversed.

Beczak, Sr. et al. teaches a hyper-extension or orthotic device that provides uniform abdominal compression and hyper-extension of the spinal column.

Claim 1 is directed to an orthotic device that includes an orthosis body having at least two segments, means for releasably securing free end portions of the at least two segments, at least two cables operably connected to the at least two segments, at least two sets of pulleys and at least two handle elements. Claim 1 recites that the at least

two handle elements are connected to respective ones of the at least two cables.

Claim 1 also recites that, after the free end portions of the at least two segments are releasably secured, the at least two handle elements are operative for releasably fastening on either one of the releasably secured segments to retain the orthosis body at desired level of tightening.

Claim 22 is directed to a thoracic lumbar sacral orthosis that includes a body brace. Claim 22 recites that the body brace includes a brace body having at least two brace body segments, means for detachably securing free end portions of the at two brace body segments, at least one cable operatively connected to the at two brace body segments and at least one handle element connect to the at least one cable. Claim 22 further recites that, after the two free end portions of the at least two brace body segments are detachably secured together, the at least one handle element is operative for releasable fastening on either one of the at least two detachably secured braced body segments to retain the body brace at the desired level of tightening.

It is respectfully that the rejection is improper because Beczak, Sr. et al. fails to teach each element of claims 1 and 22. In particular, Beczak, Sr. et al. fails to teach handle elements and, specifically, handle elements that releasably fasten to either one of the releasably secured segments. Therefore, claims 1 and 22 are allowable over the applied art.

Claims 2, 4, 5, 10-16, 19 and 21 depend from claim 1 and include all of the features of claim 1. Claims 22-29 and 31-35 depend from claim 22 and include all of the features of claim 22. It is respectfully submitted that the dependent claims are allowable at least for the reasons the independent claims are allowable as well as for the features they recite.

Claims 8 and 30 are cancelled and therefore the rejection as applied to these claims is now moot.

Withdrawal of the rejection is respectfully requested.

The Office Action rejects claims 1-9, 11-18 and 21 under 35 U.S.C. §102(b) as anticipated by Modglin (U.S. Patent No. 4,508,110). The rejection is respectfully traversed.

Modglin teaches a rigid body jacket having two sections that are joined by corset-type lacings.

It is respectfully submitted that the rejection is improper because Modglin fails to teach element recited in claim 1 as discussed above. Therefore, claim 1 is allowable over the applied art. Particularly, Modglin fails to teach the handle element recited in claim 1.

Claims 2-7, 9, 11-18 and 21 depend from claim 1 and include all of the features of claim 1. For at least the reasons claim 1 is allowable, it is respectfully submitted that the dependent claims are allowable as well as for the features they recite.

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Claim 8 is cancelled and therefore the rejection as applied to claim 8 is now moot.

Withdrawal of the rejection is respectfully requested.

The Office Action rejects claims 1, 2, 4, 5, 8, 10-16, 19 and 21 under 35 U.S.C. §102(b) as anticipated by Beczak, Sr. et al. (U.S. Patent No. 5,634,891).

Beczak, Sr. et al. '891 teaches a corset-type orthotic device for treatment of lower back pain.

It is respectfully submitted that the rejection is improper because Beczak, Sr. et al. '891 patent fails to teach each feature recited in claim 1 as discussed above. Particularly, Beczak, Sr. et al. '891 patent fails to teach the handle element recited in claim 1. Claim 1 is therefore allowable over the applied art.

Claims 2, 4, 5, 10-16, 19 and 21 depend from claim 1 and include all of the features of claim 1. For at least the reasons claim 1 is allowable, it is respectfully submitted that the dependent claims are also allowable as for the features they recite.

Claim 8 is cancelled and therefore the rejection as applied to claim 8 is now moot. Withdrawal of the rejection is respectfully requested.

The Office Action rejects claim 20 under 35 U.S.C. §103(a) as unpatentable over Modglin in view of Heinz et al. (U.S. Patent No. Re. 35,940).

Claim 20 depends from claim 1 and includes all of the features of claim 1. For at least the reasons claim 1 is allowable, it is respectfully submitted that claim 20 is also allowable as well for the features it recites.

Withdrawal of the rejection is respectfully requested.

Newly-added claims 36-44 include features not shown in the applied art.

Claims 36-43 are directed to orthotic devices. Independent claim 36 particularly includes a handle element that releasably fastens on either one of releasably connected individual segments of an orthosis body. Dependent claims 37-39 depend from claim 36 and are directed hook-and-loop fabric of the handle element. Claim 40 recites that at least one of the banks of pulleys is detachably connected to the individual segment. Claim 41 which depends from claim 36 recites that the free end portions of the individual segments are detachably connected together by hook-and-loop fabric. Claim 42 which depends from claim 36 is directed to a mechanical advantage of the banks of pulleys.

Independent claim 43 is directed to an orthotic device that includes two banks of pulleys and each bank of pulleys of each set of pulleys is detachably mounted on a juxtaposed edge of an adjacent segment.

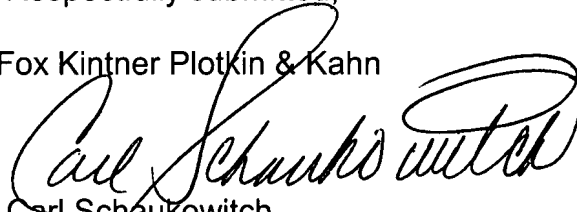
Independent claim 44 is directed to a thoracic lumbar sacral orthosis having each bank of pulleys detachably mounted on a juxtaposed edge of an adjacent segment.

In view of the foregoing, reconsideration of the Application and allowance of the pending claims are respectfully solicited. Should the Examiner believe anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below.

In the event this paper is not being timely filed, Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 01-2300.

Respectfully submitted,

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Enclosures: Petition for Extension of Time

